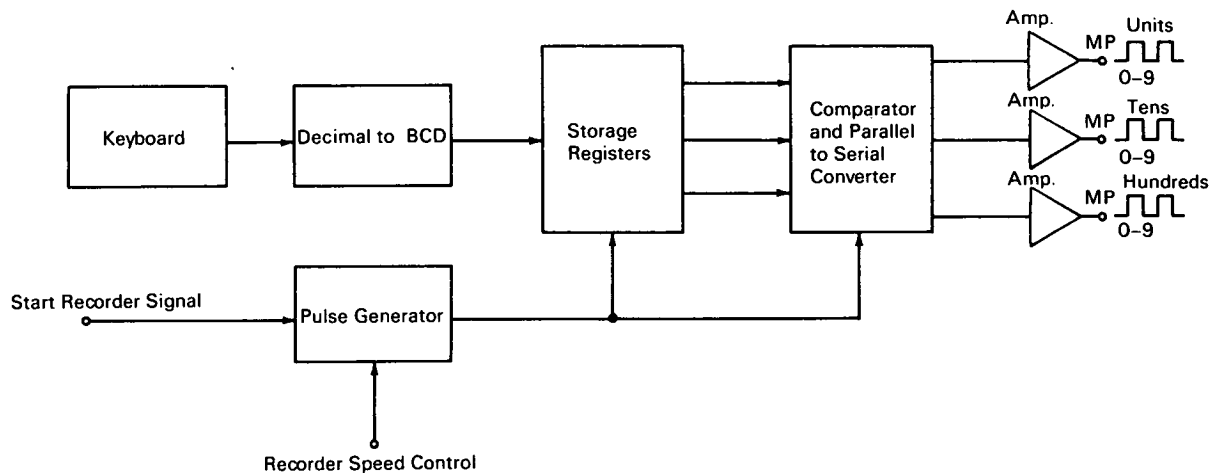


# NASA TECH BRIEF



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## Run Numbering System for Use with Data Recorders



### The problem:

To provide a permanent identification on the recorder traces of data runs by means of numerical pulse coding. The prior method was to manually mark the trace.

### The solution:

A run numbering identification system that automatically enters, by pulse coding, the number of the current data run on the recorder trace.

### How it's done:

The system consists of a keyboard, a decimal-to-binary-coded decimal (BCD) converter, storage registers, a comparator and parallel-to-serial converter, pen marker drive amplifiers, and a pulse generator. The starting run number is entered from the keyboard. This and successive numbers are displayed in the form of three separate series of pulses on the trace,

each series displaying from 0 to 9 pulses, thus giving a total system capability of identifying 999 consecutive data runs. A series of gates driven by the storage registers and pulse generator, provides pulses to the marker pens corresponding to the current number. Each succeeding run number is automatically pulsed at the run start, and only the starting or initial run number must be entered at the keyboard.

### Notes:

1. This system automatically identifies each trace, thereby saving time, bookkeeping, and frequent disturbance to records.
2. Inquiries concerning this invention may be directed to:

Technology Utilization Officer  
Marshall Space Flight Center  
Huntsville, Alabama 35812  
Reference: B67-10215

(continued overleaf)

**Patent status:**

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: Logan L. Pease  
of The Boeing Company  
under contract to  
Marshall Space Flight Center  
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